

at a workshop on antiarrhythmic drugs and self ventricular defibrillation held in Tel-Aviv on 6-7 May 1993. The lectures presented at this workshop are now in press in the *Journal of Basic and Clinical Physiology and Pharmacology*.

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- 1 van Hemel NM, Kingma JH. A patient in whom self terminating ventricular fibrillation was a manifestation of myocardial reperfusion. *Br Heart J* 1993;69:568-71.
- 2 Wiggers CJ. The mechanism and nature of ventricular fibrillation. *Am Heart J* 1940;20:399-412.
- 3 Clayton R, Higham D, Murray A, Campbell R. Self terminating ventricular fibrillation [abstr]. *Am Coll Cardiol* 1992;19:265.
- 4 Manoach M, Netz H, Erez M, Weinstock M. Ventricular self defibrillation in mammals: age and drug dependence. *Age Ageing* 1980;9:112-6.
- 5 Manoach M, Varon D, Neuman M, Netz H. Spontaneous termination and initiation of ventricular fibrillation as a function of heart size, age, autonomic autoregulation and drugs: a comparative study on different species of different age. *Heart Vessels* 1987;2 (suppl):56-68.
- 6 Manoach M, Erez M, Wozner D, Varon D. Ventricular defibrillating properties of catecholamine uptake inhibitors. *Life Sci* 1992;51:P159-64.
- 7 Manoach M, Erez M, Varon D. Properties required for self-ventricular defibrillation: influence of age and drugs. Editorial review. *Cardiol Elderly* 1993;1:337-44.

This letter was shown to the authors, who reply as follows:

SIR,—We thank Reisin, Blayer, and Manoach for their interesting suggestion that raised cardiac catecholamine concentrations may have caused termination of ventricular fibrillation in our patient. In addition to an increase in sympathetic activity, we propose that termination could also have been caused by depolarisation of nerve endings in the ischaemic myocardium upon repolarisation. This phenomenon is the result of the early efflux of potassium into the extracellular space. Experimental models of denervated hearts or of hearts with depleted catecholamine stores could be used to test these interesting hypotheses.

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#### Cost effectiveness of prophylaxis in dental practice to prevent infective endocarditis

SIR,—We compliment Gould and Buckingham on their thorough review of the cost effectiveness of antibiotic prophylaxis for dental extraction in patients at risk of endocarditis.<sup>1</sup> Their article gives the opposite view to that presented by van der Meer *et al*<sup>2</sup> from the Netherlands. We recently surveyed patients attending cardiac outpatients department at Groby Road Hospital in Leicester<sup>3</sup> and found that

patients with high-risk and low-risk cardiac lesions for endocarditis rarely attended a dentist. More worrying, most did not recall relevant advice (70% of low-risk and 86% of high-risk patients, see our table 1). The estimate by Gould and Buckingham that 50% of patients at high-risk are not provided with prophylaxis is indeed likely to be an underestimate. In reply to our questionnaires 90% of general practitioners and dentists said they would give prophylaxis to patients at high risk (fig 5). However, only 14% of general practitioners could identify at risk patients on their register and half of general practitioners and dentists thought that they did not receive adequate advice from their cardiac centre.

We wholeheartedly support Gould and Buckingham's conclusion that the use of prophylaxis in dental practice could be expanded by improved communication between doctors and dentists. Patients also need to be aware of the need to keep healthy teeth and gums and for regular dental check-ups. We have designed a simplified endocarditis risk card for patients and sticker for patients' records and medical notes which should facilitate communication between patient, doctor, and dentist. It is clear from previous surveys and the current survey that advice to patients should be simple, clear, repeated and, most importantly, given in writing. Because most patients at risk attended only cardiac clinics, the onus is on cardiologists to improve the current situation.

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- 1 Gould IM, Buckingham JK. Cost effectiveness of prophylaxis in dental practice to prevent infective endocarditis. *Br Heart J* 1993;70:79-83.
- 2 van der Meer JTM, van Wijk W, Vandenbroucke JP, Valkenburg HA, Michel MF. Efficacy of antibiotic prophylaxis for prevention of native-valve endocarditis: nationwide case-control study in the Netherlands. *Lancet* 1992;239:135-9.
- 3 Forbat LN, Skehan JD. Failure provision of antibiotic prophylaxis for at-risk patients. *Eur Heart J* 1993;14:812-8.

## BRITISH CARDIAC SOCIETY NEWSLETTER

Council met on 14 October and confirmed the programme for the annual meeting in Torquay next year. A comprehensive and exciting programme is anticipated with plenary sessions on the "Management of acute myocardial infarction: short and long term considerations" and "Intravascular and oesophageal ultrasound: Where is it going?"

Council considered the continuing turbulence in the internal market and supported the policy of pressing for a sensible contract system that is flexible and sensitive to the

special interests and casemix of individual providers.

Clinical guidelines, to be distinguished from protocols, are being developed by the Joint Audit Committee with the Royal College of Physicians (see below). Council was keen to support progress towards a comprehensive set of guidelines covering all major areas of cardiology because it considered that they will be an important part of refining the contractual process and lead to a much greater understanding of our specialty by the purchasers.

It was encouraging to hear of the formation of the Nigerian Healthcare Foundation. The president, Professor T A Lambo, and vice-president, Dr K K Akinroye, of the foundation visited London recently and met with John Parker to discuss the help and cooperation that the British cardiologists could offer Nigerian cardiologists. Further discussions on practical forms of help are continuing.

#### British Paediatric Cardiac Association

Babulal Sethia writes: "This year (1993) has been a busy one for the association. The summer meeting in conjunction with the British Cardiac Society Annual Meeting at Wembley was extremely well attended and promoted lively discussion between physicians and surgeons on the relative merits of transcatheter closure of the arterial duct, the role of thoracoscopic surgery and management of the left AV valve and atrio-ventricular septal defect. The Harrogate meeting on 26 and 27 November 1993 is due to cover heart failure and the use of stents in congenital heart disease. In 1994 our meeting in association with the British Cardiac Society in Torquay is planned to encompass the discussion of long-term outcome in patients with congenital heart disease together with a specific discussion on the issue of pregnancy in patients with congenital heart defects."

"The BPCA had been taking an active role in response to the Calman report. Although our final response has not yet been agreed, we are trying to coordinate the views of all our members in order that a unified approach may be taken in discussions involving the Royal Colleges, the SAC, and other interested parties."

#### Joint Audit Committee

David de Bono writes: "The Joint Audit Committee of the British Cardiac Society and the Royal College of Physicians of London was set up to facilitate and encourage all types of audit activity in relation to cardiology. Recently the committee sponsored an investigation into 'Times to hospital admission and thrombolysis in acute myocardial infarction' (Birkhead JS, *et al*. *BMJ* 1992;305:445-8) and 'An audit of cardiac catheter complications' (de Bono D. *Br Heart J* 1993;70:297-300). Both these studies are ongoing. The committee is also organising a series of workshops, in collaboration with the Research Unit of the Royal College of Physicians, with the aim of defining and publishing management guidelines and audit standards for common cardiac conditions. Draft guidelines on stable angina were published in July (de Bono D, Hopkins A, *J R Coll Physicians Lond* 1993;27:267-73) and the edited workshop papers are currently in press. A workshop on the management of myocardial infarction was held in September and further

workshops, including one on heart failure, are being planned. The guidelines are not intended to be prescriptive, but to act as a resource for locally based audit activity. In a different approach to audit, Dr Richard Wray has prepared guidelines on bilateral audit visits between pairs of units. Further information on any of these activities can be obtained from the chairman, Professor David de Bono, Glenfield Hospital, Leicester, LE3 9QP (tel: 0533 871471. fax: 0533 875792), who would also be happy to hear suggestions about other possible audit activities."

#### European Society of Cardiology

Philip Poole-Wilson writes: "The European Heart House was officially opened on 31 August 1993. In October the administrative section of the building was occupied. Offices in Nyon, Switzerland, and temporary offices in Sofia Antipolis have now been closed. The building is handsome and in a very attractive part of Europe. The internal rooms have not all been completed and there is opportunity for further developments in the next 5-10 years. The major meeting room is complete and the building is now available for educational and teaching purposes. The working groups are expected to use the facilities extensively and many other meetings on cardiovascular medicine are being arranged. These meetings will be sponsored by the European Society of Cardiology and will need to abide by the published rules."

"In addition there is an education and training programme for 1994. This has been organised by the Education and House Committee, which is chaired by Maarten Simoons. The programme for 1994 has events occurring each month for three days. The goal is to encourage post-graduate education among European cardiologists. Three to five faculty members will provide an intense programme. The topics covered include interventional cardiology, pacemakers, stress echocardiography, heart failure, myocardial infarction, angina pectoris, endocarditis, automatic defibrillators, and the prevention of coronary heart disease."

"The details of the programme and further information can be obtained from:

ECOR Meeting Services Department,  
European Heart House, 2035 Route des  
Colles, Les Templiers, BP 179, 06903  
Sophia Antipolis, Cedex, France."

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## CLINICAL GUIDELINES

### Choice of route for insertion of temporary pacing wires: Recommendations of the Medical Practice Committee and Council of the British Cardiac Society

The choice of site for inserting temporary pacemaker wires depends on consideration of the potential problems with venous access (common to all venous cannulation) and the particular problems of temporary wires in the chosen location. Intensive care specialists have studied the pros and cons of different routes, particularly in relation to the skill of the operator. It is clear that of the veins under consideration (internal jugular, subclavian, supraclavicular, femoral, brachial, and external jugular) those that require the least skill for successful cannulation are the femoral and brachial. They are also the sites with fewest immediate complications because the area is readily compressible. However, the success rate of relatively inexperienced operators with cannulation of the internal jugular vein is also high with few complications. The subclavian route is the most hazardous, largely because of the risk of pneumothorax and of damage to the subclavian artery, but in experienced hands is probably no worse

than the internal jugular approach. All central venous cannulation may become much less hazardous with the advent of ultrasound guides, which cost about £5000. The supraclavicular approach is popular in some parts of the United Kingdom and may well become more popular as the use of ultrasound guidance increases.

When any central venous cannula is left in situ the risks of infection and thrombosis increase. The risk of infection may be slightly higher with femoral cannulas than with jugular or subclavian ones, but with the femoral route the greatest fear has been of thrombosis with the associated risk of a massive pulmonary embolus. In early trials the incidence of thrombosis was so high that this route fell out of favour. However, concern that these trials were flawed has stimulated further research, which is in progress.

The right internal jugular vein provides the most direct route to the right ventricle and if flotation catheters are used it is the most likely to be successful. The supraclavicular route too provides direct access and potentially gives a more stable wire position. With flotation wires the left subclavian approach is also easy but use of this route may interfere with subsequent permanent pacing. The femoral route is not routinely recommended because inexperienced operators find it difficult to negotiate from here to the right heart, and there is anecdotal evidence that it gives the least stable wire position. Use of the femoral route restricts the patient's mobility. This is important if there is a wait of a week or more before a permanent pacemaker is implanted. Immobility also increases the likelihood of deep venous thrombosis. The subclavian route is the most comfortable for the patient and does not restrict mobility.

We recommend that the best route for most patients is the right internal jugular vein, particularly for those operators with the least experience in central venepuncture. Operators who are experienced in subclavian and supraclavicular puncture should use these approaches and the patient will be minimally restricted. The femoral, brachial, or external jugular veins are the preferred routes in patients who are being given thrombolytic agents.

## NOTICES

The 1994 Annual Meeting of the **British Cardiac Society** will take place at the Riviera Centre, Torquay from 17 to 20 May.

Medical screening provides many opportunities for the prevention of disease and handicap. What can it offer and what is its limitation? Based on several case studies, **Medical screening: the way forward**, organised jointly by *BMJ* and *Journal of Medical Screening* is a one day conference to be held on 26 January 1994 at the QE2 Conference Centre, London to examine the medical, scientific, ethical, social, psycho-

logical and economic aspects of screening. For more information contact Pru Walters, BMA Conference Unit, BMA House, Tavistock Square, London WC1H 9JR. (tel: 071-383 6605. fax: 071-383 6400).

The **Tenth ASEAN Congress of Cardiology** will be held in Bangkok from 26 to 30 November 1994. Further details can be obtained from the secretariat: Dr Y Sahasakul, Division of Cardiology, Department of Medicine, Siriraj Hospital, Bangkok 10700, Thailand.

**Short Courses in Cardiovascular Epidemiology:** This course, which is largely for trainees in cardiology and cardiovascular medicine, will be held from 11 to 13 April 1994. The course will take place at the London School of Hygiene and

Tropical Medicine. It will cover the interpretation of epidemiology studies of cardiovascular disease and primary and secondary prevention. Further details can be obtained from Dr Margaret Parker, Short Course Office, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT (tel: 071-927 2074).

Under the auspices of the European Society of Cardiology a joint meeting of the Working Group on Exercise Physiology, Physiopathology and Electrocardiography and the Heart Failure Task Force entitled **Heart failure—therapeutic targets—the pump or the periphery** will be held from 9 to 11 June 1994 in Glasgow. Further information can be obtained from the Secretariat, Adelphi Communications Limited, Adelphi Mill, Bollington, Cheshire, SK10 5JB (tel: 0625 575500).